



NOTES:

- THIS IS A UHV PART, ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTROPOLISHING, THE PART NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN.
- CHAMBER ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2×10^{-10} STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS: ALCATEL SAM-110TCL DU PONT CEC 24-120B VARIAN MS-9, MS-90 OR MS-18

CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.

FINAL TEST WILL CONSIST OF SURROUNDING THE CHAMBER (BAGGING) WITH HELIUM. THE CHAMBER WILL BE REJECTED IF A 2% DEFLECTION ON THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.
- KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
- DIMENSIONS IN [] ARE MILLIMETERS AND ARE FOR REFERENCE ONLY.
- ELECTRO POLISHING IS NEEDED BEFORE WELDING, PRIOR TO ELECTROPOLISHING, THE CHAMBER NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN. THE CHAMBER VACUUM SIDE SURFACE ROUGHNESS SHALL BE BETTER THAN 63 MICROINCH RMS AFTER ELECTROPOLISHING.
- WELD SHALL BE GAS TUNGSTEN ARC (GTAW) OR TUNGSTEN INERT GAS (TIG) ON VACUUM SIDE OF JOINTS.

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
2	K1-310102-00	K1-31 END FLANGE		2
1	K1-310101-00	K1-31 RECTANGULAR CHAMBER		1

PARTS LIST			
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		LOG NUMBER K1310100-00	
TOLERANCES - ANGULAR X - .03 [0.762] XX - .01 [0.25] XXX - .005 [0.127]		THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY	
SURFACE ROUGHNESS 125		REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.	SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5		DO NOT SCALE DRAWING	
DRAWN BY CORCUERA		DATE 6/10/97	CHIEF DESIGN ENGINEER D. SHU
CHECKED BY J. CHANG		DATE 7/3/97	GP LEADER T. KUZAY
DESIGNER CORCUERA/CHANG		DATE 6/30/97	PROJECT MGR.
RESPONSIBLE ENGINEER J. CHANG		DATE 7/3/97	APPROVED/RELEASED
MATERIAL SEE PARTS LIST		SCALE 1:1	SIZE C
		DRAWING NUMBER K1-310100-00	
		SHEET 1 of 1	

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
	REVISIONS			